
Courtesy Sebastian Tröeng
Caribbean Conservation Co.

Marine Reptiles

Olive ridley sea turtle

Lepidochelys olivacea

SPECIES STATUS:
Federally Listed as Threatened
State Listed as Threatened
IUCN Red list – Threatened

SPECIES INFORMATION: Mature males are distinguished by longer, thicker tails, an elongated carapace, and one enlarged, hooked claw. Olive ridleys are the smallest and most abundant sea turtle, with adult carapace lengths of 60 to 70 centimeters (about two feet). Little information exists on the feeding behavior of post-hatchlings and juveniles living in pelagic habitats, but most likely they are exclusively carnivorous (e.g., invertebrates and fish eggs). Juveniles and adults eventually feed on a wide variety of benthic organisms. Growth is unknown and age at sexual maturity is seven to 15 years. Females often return to the same site to lay additional clutches every month and do so *en masse*. Incubation lasts 46 to 65 days. Each clutch contains about 100 eggs and sex determination is temperature dependent. Genetic analysis of olive ridley turtles taken in the Hawai'i-based longline fishery shows that about two-thirds of the animals came from the eastern Pacific, while the remaining one-third originated in the western Pacific or Indian Ocean. Thus Hawai'i represents a point of convergence for these source areas.

DISTRIBUTION: Historically, olive ridley sea turtles may have inhabited the coasts of all Hawaiian Islands. Today, they are rarely but more commonly seen around the Hawaiian Islands. Nesting has only been recorded once in Hawai'i, on Maui in 1985. Post-hatchlings and juveniles live in pelagic waters, but little is known of their specific distribution.

ABUNDANCE: There is no clear trend in abundance.

LOCATION AND CONDITION OF KEY HABITAT: Olive ridley sea turtles are most often found in shallow water around reefs, bays and inlets. Nesting areas are extremely critical to the survival of the olive ridley sea turtle. Most nesting is on continental beaches. Preferred nesting habitat is mid-level beaches free of debris.

THREATS:

- Incidental take from longline fisheries is the main threat. An excess catch of turtles in the Hawai'i deep-set longline fishery (mostly for tuna) has resulted in a Section 7 consultation under the Endangered Species Act that is ongoing. A number of turtles

have also been found dead and entangled in marine debris. Incidental or directed take in other jurisdictions is a threat;
- Nesting habitat degradation is a threat in other jurisdictions.

CONSERVATION ACTIONS: Past efforts have included a threatened listing by the State of Hawai'i and U. S. government and resultant ban on capturing sea turtles; and various partnerships with local and national public and private organizations. In addition to common statewide and marine conservation actions, specific actions include:

- Cooperate with jurisdictions where nesting occurs to restore nesting habitat;
- Collaborate with the National Marine Fisheries Service through the nearshore Incidental Take Permit process and otherwise to protect and manage turtles in the marine environment including both pelagic and foraging habitats to decrease incidental and direct takings;
- Continue to protect and manage turtles and nests on nesting beaches;
- Work to reduce the amount of marine debris in nearshore and breeding habitats;
- Increase education and outreach efforts, particularly to address threats such as marine debris;
- Continue on-going partnerships with local conservation groups that monitor and conserve turtles as well as conduct research and outreach programs.

MONITORING:

- Continue to monitor nesting sites for population of nesting turtles;
- Continue turtle stranding response partnerships;
- Continue partnership to monitor turtles harmed or killed by marine debris;
- Monitor number of turtles stranded or taken as bycatch to determine if education and law enforcement efforts are successful.

RESEARCH PRIORITIES:

- Continue research on ways to decrease bycatch;
- Determine distribution, abundance, and status of post-hatchlings, juveniles, and adults in the marine environment.

References:

Earth Tech, Inc. 2005. Preliminary draft EIS: issuance of an ESA Incidental Take Permit to the State of Hawaii. Honolulu, HI: Earth Tech, Inc.

Gulko D, Eckert K. 2003. Sea turtles: an ecological guide. Honolulu, HI: Mutual Publishing. 128 pp.

Hawai'i Department of Land and Natural Resources (DLNR). 2005. Application for an Individual Incidental Take Permit pursuant to the Endangered Species Act of 1973 for listed sea turtles and Hawaiian monk seals in inshore marine fisheries in the Main Hawaiian Islands managed by the State of Hawaii. Honolulu, HI: DLNR. 69 pp.

International Union for the Conservation of Nature and Natural Resources. Threatened Red List.

Available from: http://www.redlist.org/search/search-expert.php (Accessed May 2005).

National Marine Fisheries Service and U.S. Fish and Wildlife Service. (US) [NMFS and USFWS]. 1998. Recovery plan for U.S. Pacific populations of the olive ridley turtle (*Lepidochelys olivacea*). Silver Springs, MD: National Marine Fisheries Service. 95 pp.